

***LineUp With Math™* Alignment**  
**To the Massachusetts Mathematics Curriculum Framework**  
**Grade-Level Standards, November 2000**

**Number Sense and Operations Strand**

*Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*

**Grade-Level Standard**

8.N.3 Use ratios and proportions in the solution of problems in particular, problems involving unit rates, scale factors, and rates of change.

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

**Measurement Strand**

*Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*

**Grade-Level Standard**

8.M.1 Select, convert (within the same system of measurement), and use appropriate units of measurement or scale.

***LineUp With Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

8.M.5 Use models, graphs, and formulas to solve simple problems involving rates, e.g., velocity and density.

--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.